REMARKS

Claims 30-48, 51-54 and 58-63 are pending in the application. **Please note that the claims amendments made herein are identical to those set forth in the Amendment After Final (filed February 23, 2004) and previously commented upon by the Examiner in his Advisory Action.**

By this Amendment, claims 29, 49, 50, 55, 56 and 57 have been cancelled. New claims 58-63 have been added, but do not incorporate any new matter. Support for the claims is found at least in the specification at page 9.

In support of the arguments set forth in this response, the applicants provide herewith the executed Second Declaration of Dr. Peter James Watts Under 37 C.F.R. 1.132 (hereinafter "Sec. Dec.").

I. Rejection Under 35 U.S.C. § 112, First Paragraph.

The Examiner has rejected claims 29-57 under 35 U.S.C. § 112, first paragraph alleging that the specification does not enable the full scope of the claims. In particular, the Examiner argues that the claims are not enabled for subject matter including means for preventing the release of the drug until the composition reaches the terminal ileum or the colon and for drugs other than those not specifically disclosed.

The applicant respectfully traverses this rejection, in part.

With respect to the Examiner's first point, the applicants have amended the claims to recite that the "means" is a coating of a polymer that dissolves at a pH of 4.6 or above. As would have been known to a person of skill in the art, polymers which dissolve at these pH levels facilitate the movement of a substantially intact composition through the gastrointestinal tract until the terminal ileum or colon is reached, where the pH of the tract is 4.6 or above. In view of this Amendment, it is believed that the Examiner's rejection on the first ground is no longer applicable. **Moreover, in the Advisory Action the Examiner has confirmed that the amendments herein are sufficient to overcome this rejection.**

With respect to the Examiner's contention that the claims are only enabled as to the specifically recited types of drugs, the applicant respectfully disagrees. Under 35 U.S.C. § 112, a

chemical compound may be defined by its intended use or function when sufficient criteria are provided such that the essential structural aspects of the compound are discernable to a person of skill in the art. In the present situation, the applicant has provided more than sufficient criteria. The compound must be a drug, *i.e.*, it must be useful therapeutically and/or diagnostically. Such determination is well within the abilities of one of ordinary skill in the art. Sec. Dec. at ¶ 21.

The compound must have a free acid group, a chemical functional group well known to a person of skill in the art. Sec. Dec. at ¶ ¶ 22, 23. A drug for use in the invention must have a p*K*a in a range of 2.0 to 9.0, a constant easily calculated by a person of skill in the art. Sec. Dec. at ¶ ¶ 24, 25. The drug must have a higher solubility at pH 4.5 to 8.0 than the free acid form of the same drug, a chemical characteristic which is easily determined by routine empirical testing. Sec. Dec. at ¶ ¶ 26, 27, 28.

Moreover, the Examiner's reliance on the Hardy reference as demonstrative of the unpredictability of the art is misplaced. Sec. Dec. at ¶ ¶ 30-36. Hardy, published in 1989, is not representative of the "state of the art" in 1997, the earliest priority date of this application. *Id.* at 31.

Additionally, Hardy speculates only on the alleged unreliability of time tests used in 1989 and earlier to predict the release profile of a given dosage form *in vitro*. *Id.* at ¶ ¶ 33, 4. The release profile of the present invention has been shown by actual in vivo tests, to have a predictable and determinable release profile. *See, e.g.*, Example 2 of the Specification; Sec. Dec. at ¶ ¶36.

For at least these reasons it is submitted that the § 112, first paragraph, rejection is overcome. Its reconsideration and withdrawal is respectfully requested.

II. Rejection Under 35 U.S.C. § 112, Second Paragraph - Omission of Essential Elements.

The Examiner has maintained the rejection of claims 29-57 under 35 U.S.C. § 112, second paragraph. The Examiner asserts that the claims omit the following: (i) a specified polymer and (ii) pH dissolve range that is used to coat the composition and to prevent the release of the drug until the composition reaches the terminal ileum or the colon.

The applicant respectfully submits that this rejection is no longer applicable. Accordingly, its reconsideration and the withdrawal is respectfully requested. Additionally, it appears

that the Examiner has rejected claim 57 on the same grounds, asserting that it does not "appear to require the drug to be effective to treat the recited diseases." The applicant respectfully traverses the rejection. Claim 57, now claim 63, recites use of an effective amount of a drug that is effective in the treatment of ulcerative colitis, Crohn's disease, irritable bowel syndrome, or inflammatory bowel disease. Accordingly, it is requested that the Examiner reconsider and withdraw the rejection. **It is noted that in the Advisory Action, the Examiner has stated that this rejection is overcome.**

III. Rejection Under 35 U.S.C. § 102(b) and/or 35 U.S.C. § 103(a).

The Examiner has rejected claims 29, 32-36, 38-41, and d48-57 under 35 U.S.C. § 102(b) and/or 35 U.S.C. § 103(a) as being anticipated by or in the alternative obvious over Great Britain Patent No. 1017674, entitled Coated Pharmaceutical Compositions, to F. Hoffmann-La Roche & Co. ("La Roche"). The Examiner contends that La Roche discloses a coated pharmaceutical composition in the form of a granulate, tablet, or gelatin capsule that prevents release of alkali metal salicylate until the disclosed composition reaches the colon. Relying on col. 1, lines 9-20, col. 6, lines 83-125, and claims 4 and 8 of La Roche, the Examiner asserts that the disclosed composition "fall[s] within the scope of the applicant's claims."

Additionally, the Examiner argues in the alternative that "at the very least the claimed invention is rendered obvious within the meaning of 35 U.S.C. § 103, because the prior art discloses products and uses that contain the same exact ingredients/components as that of the claimed invention." In support of this non-specific conclusion, the Examiner cites *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980) and *In re May*, 197 USPQ 601, 607 (CCPA 1978).

The applicant respectfully traverses both of these rejections. La Roche describes compositions in which the active medicament is released in the later part of the small intestine in the colon. The compositions described include (1) a nucleus (for example, a tablet, granulate, or gelatin capsule) containing the active drug and conventional pharmaceutical adjuvants, coated, (2) with a layer of an acid-soluble coating material that is resistant to both alkalis and intestinal juices, and (3) with a water-soluble intermediate layer, and third, a layer of an alkali-soluble coating material that is resistant to acid and gastric juices.

The compositions disclosed in La Roche have a structure that is different from that of the compositions of the present invention. The composition comprise a nucleus (1) that is coated with layers (2) and (3).

In contrast, the compositions of the present invention include pellets (at least one pellet) containing a salt of a drug that are coated with a rate determining membrane and are contained within a tablet or capsule that is coated with a material that prevents release of the drug until the composition reaches the terminal ileum or colon, and/or individually coated pellets that are coated with the same coating.

Moreover, the composition of La Roche does not render obvious the invention as claimed. First, as discussed above, La Roche does not teach or suggest each element of the invention as claimed. Moreover, there is no motivation in the LaRoche patent to make modifications that would have caused a person of ordinary skill to arrive at the invention. The Examiner's failure to point out any motivation is not unexpected, for the reference is simply silent on this point. In addition, it would have been known to a person of skill in the art that the coated compositions disclosed in La Roche are not suitable for producing compositions in the form of a coated tablet or capsule that contains drug containing pellets. If the coating layers described in La Roche were applied to a capsule or tablet, the inner layer that is insoluble in intestinal juices would not dissolve and, as a result, the capsule or tablet would be unable to dissolve or disintegrate in the intestine and the drug-containing pellets inside would never be released.

Accordingly, for at least the reasons given above, it is respectfully requested that the Examiner reconsider and withdraw the rejection based upon the LaRoche patent.

CONCLUSION

In view of the foregoing it is respectfully requested that the Examiner reconsider and withdraw all rejections and allow the claims at the earliest opportunity.

Respectfully submitted,

PETER JAMES WATTS

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(Date)

KRISTYNE A. BULLOCK
Registration No. 42,371
AKIN GUMP STRAUSS HAUER & FELD LLP
One Commerce Square
2005 Market Street, Suite 2200
Philadelphia, PA 19103-7013
Telephone: 215-965-1200
Direct Dial: 215-965-1348
Facsimile: 215-965-1210
E-Mail: kbullock@akingump.com

KAB:cmb
7238650